Council Meeting of August 12, 2015

Agenda Item No. 9a

REQUEST FOR COUNCIL ACTION

SUBJECT: Stormwater Fee Changes

SUMMARY: Revised Stormwater Fees are being proposed for Council Approval. Increased revenues are needed due to the increased demand for stormwater projects in areas not eligible for impact fee money.

FISCAL IMPACT: Between $195,378.20 and $983,537.42 additional annual revenue into the Stormwater enterprise fund based on the option that is chosen.

STAFF RECOMMENDATION:

Staff recommends that Council keep the current rate of $4.02 and modify the stormwater ERU calculation based on two alternatives

1. Change the ERU calculation from 1 ERU per ¼ acre (10,890 sq-ft) to 1 ERU per 4,000 Square Feet.
2. Change the ERU calculation from 1 ERU per ¼ acre (10,890 sq-ft) to 1 ERU per 6,000 Square Feet.
3. Change the ERU calculation from 1 ERU per ¼ acre (10,890 sq-ft) to 1 ERU per 8,000 Square Feet.

MOTION RECOMMENDED:

"I move to adopt option # ____ to modify the Equivalent Residential Unit (ERU) stormwater calculation, and ____ (keep or remove) the 20-acre cap on the calculations as proposed in the staff report."

Roll Call vote required

Recommended by:

Justin Stoker
Public Works Deputy Director

Recommended by:

Wendell Rigby
Public Works Director

Recommended by:

Ryan Bradshaw
Finance Manager

Recommended by:

Bryce Haderlie
Interim City Manager

BACKGROUND DISCUSSION:

On January 28, 2015 staff presented a proposal to modify the stormwater rate and ERU calculation for all residents and businesses in the City of West Jordan. In that meeting, several options were discussed related to how other cities figure their rates, including detention and level of pretreatment. In that meeting the City Council asked staff to review the impacts if the City were to base calculations on the percentage of impervious area on a property and then to return and report.

Following Council direction, City staff contracted with the GIS department at Utah State University (USU) to analyze the impervious area of the City and to outline a program that where non-residential rates would be based upon their percentage of impervious area. While that work by USU is still progressing, it has suffered continually from unexpected complications and delays.

In the interim, it was found that there are several unintended consequences by basing calculations on percentage of impervious area that may call into question whether that is the best way to proceed. Based on feedback from other cities, basing calculations on impervious area is a very time and data intensive task that usually requires the work of one or two dedicated employees to manage, and as demonstrated by USU's ability to get us the initial data set. Their jobs typically include initial calculations, requests for recalculation, appeals regarding the calculation, physical modifications to the site and how and when that triggers a recalculation, inspections into sites that may have made undocumented changes to their impervious area, etcetera.

When those that are subject to the Equivalent Residential Unit (ERU) calculation were reviewed, it was determined that the vast majority of those properties lie within a 15% window (between 77% and 92%) of impervious area. To avoid the conflicts and disputes found by other nearby cities, staff recommends keeping the simple approach to calculating the ERU based upon total area of the property. This simple method has shown to be easily handled by current staff.

With the average Single Family Residential (SFR) property with an impervious area of about 30% and remaining properties with an average between 77% and 92%, some adjustments must be made to make a fair comparison between residential and other properties. While it is understood that it is standard practice to pass storm water through detention and pretreatment, this only addresses one aspect of storm water, the peak runoff. The greater concern, perhaps, lies with the volume of water that leaves a property rather than infiltrating into the ground. With the impervious area of non-SFR properties about 3x the amount of SFR properties we are seeing a large impact resulting in the need for City-owned detention basins and storm drain systems based upon the volume of water, rather than the peak.

The City is currently reviewing the draft for the 2015 West Jordan Stormwater Master Plan. In this draft plan, over $43M is identified in stormwater capital deficiencies. Of those deficiencies, $17.4M of those projects are not eligible for impact fee money.

After paying for equipment and labor for inspection, cleaning, and maintenance, the recently approved stormwater budget for the fiscal year 2015/2016 has $80,000 for the repair and construction of stormwater infrastructure. The request for repairs and construction of new projects greatly outpaces the available $80,000 annually.

The current proposal is to leave the current stormwater rate at $4.02 and to modify the ERU calculation to pay for on-going maintenance and new projects in areas that are not eligible for impact fee money.

For comparison purposes, the following table shows how neighboring cities are calculating their stormwater fee:

City	ERU area (sq-ft)	2014 Storm Fee
Draper	3,000	$6.00
Midvale	3,000	$7.62
Riverton	2,744	$7.00
South Jordan	4,752	$8.50
Sandy	2,816	$6.00
SLC	2,500	$4.49
West Jordan	10,890	$4.02
West Valley	2,830	$4.00

Note that all other cities base their ERU off of the impervious area, which is usually only about a 8% to 23% discount off of the total area.

To help demonstrate how the stormwater rate impacts businesses, the following table was put together for a comparable "big box" business within West Jordan and what their stormwater rates would be in other surrounding cities. Note that these calculations take into account the proper area (7.45 acres of impervious area vs. 9.71 acres of total area) in how the ERU is calculated for each appropriate city.

City	ERU	# ERUs	Rate	Annual Fee
Draper	3,000	108.17	$ 6.00	$ 7,788.53
Midvale	3,000	108.17	$ 7.62	$ 9,891.43
Riverton	2,744	118.27	$ 7.00	$ 9,934.35
South Jordan	4,752	68.29	$ 8.50	$ 6,965.75
Sandy	2,816	115.24	$ 6.00	$ 8,297.44
SLC	2,500	129.81	$ 4.49	$ 6,994.10
West Jordan	10,890	38.84	$ 4.02	$ 1,873.64
West Valley	2,830	114.67	$ 4.00	$ 5,504.26

As was previously mentioned, the proposal is to keep the rate at $4.02 and to leave the City calculating the number of ERUs based upon total area. The proposal is to modify the ERU value from 10,890 sq-ft to a value much lower to account for the increased volume of water that non-single family residential properties contribute to the City's stormwater system. If you take the average of the other cities, you have an ERU value of 3,092 impervious sq-ft. It would equate a total area of 3,803 sq-ft based upon the property having an average impervious area of 77%.

	Existing Payments with ERU=10,890 sq-ft and 20-acre cap	Payments with ERU=8,000 sq-ft and 20-acre cap	Payments with ERU=6,000 sq-ft and 20-acre cap	Payments with ERU=4,000 sq-ft and 20-acre cap
Total Monthly	$47,869.90	$64,151.42	$85,535.23	$128,302.84
Total Annually	$574,438.83	$769,817.03	$1,026,422.70	$1,539,634.06

To illustrate how the ERU change would impact businesses, the following shows what the annual stormwater rate would be if applied through the various proposed changes:

- 4,000 sq-ft ERU - $5,100.99 annually
- 6,000 sq-ft ERU - $3,400.66 annually
- 8,000 sq-ft ERU - $2,550.49 annually
- 10,890 sq-ft ERU - $1,873.64 annually (current payment)

Even with a 4,000 sq-ft ERU, the example business would still pay the lowest amount if located within West Jordan when compared to any of the surrounding cities.

The Cap

There have been discussions on whether or not the 20-acre cap should remain. A review of the 20-acre cap shows that there would be 31 properties that would be impacted if the cap was removed.

The 31 properties that exceed 20-acres and are subject to the cap include the:

- airport
- two golf courses (main course and the driving range down by the river)
- two middle schools (Sunset Ridge Middle School and West Jordan Jr High)
- two high schools (Copper Hills HS and West Jordan HS)
- Salt Lake Valley Community College
- West Ridge Academy (Boys Ranch)
- Rocky Mountain Power substation on 90th
- South Valley Water Rec. Plant
- Jordan Valley Water Conservancy District
- Jordan Valley Medical Center
- Five high density residential complexes (mobile home park, condos, apartments)
- Thirteen major businesses (i.e. SME Steel, Dannon, Boeing, Oracle, Fairchild, Interstate Brick, etc.)

In review, it was determined that it was predominantly the public or semi-public properties, not businesses or apartments, that would be most impacted by the removal of the cap. For example, the golf course on 9000 S and 2700 W would see their fee go from $321.60 to somewhere between $3,332.59 and $6,665.17 each month, based upon the ERU and the removal of the cap. With this understanding, staff recommends that the cap remain in effect for the first 20-acres, as currently written.

Attachment:

Table 5-1 from Draft 2015 Stormwater Master Plan

Table 5-1
Capital Improvement Plan

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
1	1	7000 South from 3000 West to the Jordan River	Existing storm drains along 7000 South discharges into the South Jordan Canal. Storm drains east of the South Jordan Canal do not have sufficient capacity to convey flows to Bateman pond.	Install trunk line from Constitution Park consisting of 125 feet of 36-inch pipe, 4,670 feet of 42-inch pipe, 2,320 feet of 48-inch pipe, 3,380 feet of 60-inch pipe, 300 feet of 7x4 foot box culvert, and 1,610 feet of 66-inch pipe including outlet works. Route flows in the trunk line through the Bicentennial detention basin and rework the detention basin's inlet and outlet structures accordingly.	$6,132,000	Not Eligible
2	2	3200 W and 6880 South, 6920 South, and 6960 South	City and modeling has identified flooding in this area, especially in the downhill cul-de-sac in 6960 South. Inadequate pipe capacity, low surface elevations, and conflicts with the outlet structure of the Constitution Park detention basin.	Install 42-inch interceptor storm drain in 3370 West, 6880 South, 3300 West, and 7000 South from 6775 South to Constitution Park. Separate the inlets in 6880 South, 6920 South, and 6960 South by installing a new parallel storm drain in 3200 West which bypasses the detention basin and connects to Project 16.	$1,323,000	Not Eligible
3	2, 4, 5	3200 W and 6880 South, 6920 South, and 6960 South	City and modeling has identified flooding in this area, especially in the downhill cul-de-sac in 6960 South. Inadequate pipe capacity, low surface elevations, and conflicts with the outlet structure of the Constitution Park detention basin.	Lower Constitution Park base elevations by 2 feet, reconstruct incoming spill structures and piping so flows into the basin spill at or near the basin's lowest elevation, and reconstruct outlet works with a minimum 14-inch diameter orifice plate.	$1,296,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
4	7	Executive Drive between 7265 South and Richland Circle	City has identified flooding issues here in the past. The existing storm drain has low slopes. Modeling reveals that 10-year flows are over pipe capacity. The area is a low spot in the curb and gutter system, and ponding flows flood downhill driveways on the east side of the road. Connection issues between dual irrigation and storm drain lines.	Increase street inlet capacity and upsize existing 24-inch pipe to a 36 inch pipe with 30-inch pipe at the south end of Executive Drive. This solution should be done in conjunction with Project 11.	$544,000	Not Eligible
5	8	Straw Circle	City has identified flooding issues here in the past. The required head to spill into the Harvest Park detention basin creates backwater effects. The area is a low spot in the curb and gutter system and has a downsloping driveway.	Due to elevation limitations with the outfall to the canal, piping solutions will have minimal effectiveness in alleviating the problems seen in Straw Circle. Surface drainage is likely critical to drainage in this area and appears to function sufficiently until flows reach the end of Straw Circle. The preferred solution should convey surface flows to the detention basin through a street-to-detention spillway with additional re-grading at the homes most affected by surface flows.	$26,000	Not Eligible
6	9	6645 South and 2200 West	Piped storm drain daylights to open ditch which is frequently clogged with weeds, debris, and leaves.	Install 27-inch storm drain to replace the open ditch and continue 27-inch along 2200 West to alleviate surcharging.	$267,000	Not Eligible
7	10	7055 South and 1115 West	City has identified erosion issues at the west end of 7055 South at this location. Current inlets do not connect into the storm drain system.	Replace inlets and connect to new 7000 S storm drain.	$54,000	Not Eligible
8	11	Temple Drive from 6790 South to Storm Drainage near 7000 South	City has identified that this area lacks storm drain conveyances.	Install and upsize storm drains in 1300 West from Bateman Point Drive to 7000 South to 18-inch pipe.	$217,000	Not Eligible
9	12	Drake Lane and Redwood Road	City has identified that ADS pipes crossing Redwood Road are damaged and need replaced.	Install new pipes by pipe bursting or similar trenchless construction.	$154,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
10	13	7600 South and Redwood Road	City has identified that ADS pipes crossing Redwood Road are damaged and need replaced.	Install new pipes by pipe bursting or similar trenchless construction.	$131,000	Not Eligible
11	14	Camelot Way and 7175 South	City has identified flooding in low spot of curb and gutter. The inlets tie into irrigation/storm drain lines in backyards and lack and access manhole.	Install new 30-inch storm drain with inlets in Camelot Way from 7125 South to the new trunk line in 7000 South.	$250,000	Not Eligible
12	15	Harvest Lane from 2200 West to 2290 West	City has identified flooding in this area. Modeling shows that storm drain may have adverse grades and act as bubble up in Arthur Drive.	Install new 21-inch storm drain in 2200 West from Harvest Lane to 7200 South (approximately) with 18-inch pipe and inlets at the intersection of 2200 West and Harvest Lane.	$153,000	Not Eligible
13	16	Sunrise Place 1655 West	Isolated storm drainage in the strip mall bubbles up in the road and floods the strip mall parking lot.	Install new 18-inch storm drain from the existing bubble up grate in Sunrise Place to the existing 18-inch storm drain in Sunrise Place East.	$91,000	Not Eligible
14	6	Harvest Ridge Drive between 7400 South and Jordan Meadows Lane	City has identified flooding issues here in the past. The existing storm drain has low slopes and the required head to spill into the Jordan Meadows detention basin creates backwater effects. The area is also a low spot in the curb and gutter system.	Install new 24-inch storm drain that will be disconnected from the other storm drain line coming to the detention from the west. This will alleviate the backwater effects in Harvest Ridge Drive.	$162,000	Not Eligible
15	3	7480 South and Autumn Drive	City has identified local flooding issues here in the past.	Due to lack of surface options without causing flooding to adjacent homes, this solution should include 100-year storm event capacity. Upsize existing 15-inch outfall to the canal with a 30-inch with increased inlet capacity and add 18-inch storm drain with inlets in Spring Drive.	$78,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
16	17	6600 South and Clernates Drive	The system along 6600 south from Beargrass Road to the intersection of Clernates and along Clernates from 6600 South to Wake Robin Drive is generally overcapacity in a 10-year event. This is causing water to flow in the surficial street system where it is unable to be tracked by the model. This accounts for City observations of inlet capacity issues in this area – which the model reveals are more of a pipe capacity issue.	Upsize piping in the area to be able to convey 10-year flows in the pipe without surcharging. Pipes generally are upsized from 30-inch to 42-inch within the project area along 6600 South and south on Clernates to Saguaro.	$955,000	Not Eligible
17	21	Approximately 7660 South from Sunrise Place to Temple Drive	Modeling shows that the existing storm drain/irrigation piping has insufficient capacity to convey flows to the North Jordan Canal.	Upsize storm drain piping to 21" following the existing storm/irrigation alignment.	$392,000	Not Eligible
				Northern Area Subtotal	**$12,225,000**	
18	24	7800 South Wetland Ponds	Maintenance staff has noted excessive sediment collection between the 2nd and 3rd ponds. Ponds do not have an effective access to remove sediment.	Stabilize slope and add access road between the 2nd and 3rd pond for heavy equipment access during cleaning and sediment removal. Fix control gate from the North Jordan Canal.	$100,000	Not Eligible
19	25, 27	4000 West from 8390 South to 7800 South	City staff has identified that the corrugated metal pipe in the west side of the road has deteriorated and needs repair. Current pipe configuration leads to flows in Nike Drive entering against flows in 4000 West.	Upsize existing storm drain in the west side road to 24-inch diameter from 8380 South to Nike Drive, to 30-inch diameter from Nike Drive to 7875 South, and to 18-inch diameter from 7875 South to 7800 South.	$923,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
20	26	8518 South and Festival Way	Low slopes lead to flooding at this location. There is no surface outlet here so pipes must carry the 100-year event.	Replace and lower the culvert under the railroad with a 36-inch diameter pipe. Replace the 15-inch pipe across Bingham View Drive with a 24-inch pipe and increase inlet capacity. Review surface flow options to accommodate 100-year events in case inlets or pipes are clogged. Lower the detention basin at Dora Lee Park to a minimum depth of 4662.5 feet (1.5 feet) with gradual grading, new outlet structure, and new landscaping. Evaluate proper orifice plate sizing at Dora Lee Park.	$260,000	Not Eligible
21	28	Axel Park Road from 5750 West to Bagley Park Road	The City has received flooding complaints from businesses in this area. Currently there is no storm drain in Axel Park Road. The closest downstream storm drain inlets show significant flooding in the model.	Install new 24-inch pipe in Axel Park Road west of Hawley Park Road and install new 30-inch pipe in Axel Park Road from Hawley Park Road, down Bagley Park Road and across Old Bingham Highway to the drainage ditch.	$898,000	Not Eligible
22	29, 42	4950 West from Park Vale Drive to 7670 South	Low slopes and pipe capacity in 4950 W Drive prevents flows in 4950 West south of Wood Spring Drive from heading north.	Add 5 18-inch storm drain pipes with inlets from the north side of 7800 South to the existing storm drain pipes on the south side of 7800 South to prevent water from flowing north along 4950 West. Evaluate proper orifice plate sizing at Bridal Creek detention basin.	$69,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
23	30	Dannon Way from 5650 West to West Ridge Academy	The roadside drainage ditch lacks sufficient capacity to convey runoff from this area.	Install 24-inch pipe in Dannon Way from Hawley Park Road west to the existing 24-inch line, and install 36-inch pipe from Hawley Park Road east to the existing 36-inch pipe at West Ridge Academy.	$643,000	Not Eligible
24	31	3400 West from Lady Dove Lane to 9200 South	This area does not have any storm drainage or curb and gutter and lacks a direct path to West Jordan's storm drain system.	Install 750 feet of 18-inch pipe in 3400 West and connect to the existing storm drain in the turn-around east of the Salt Lake Community College. Install 1,900 linear feet of curb and gutter in 3400 West from Lady Dove Lane to the Salt Lake Community College.	$158,000	Not Eligible
25	32	8200 South and 1500 West	Sediment from Bingham Creek frequently clogs the outlet of the storm drain from 8200 South and 1500 West. The storm drain enters the creek at a very low elevation.	Cut back the 18-inch pipe and install outlet structure with apron. Cutting back the pipe will increase the outlet elevation, and the concrete outlet structure will reduce sediment deposit and ease maintenance efforts.	$7,000	Not Eligible
26	33	2200 West from 7970 South to 7850 South	Several small diameter drain pipes open flow into the Veterans Memorial Park and are frequently clogged.	Install 18-inch pipe in 2200 West from 7970 South (the southernmost existing 6-inch drain) to 7800 South.	$160,000	Not Eligible
27	34	Heritage Park Detention Basin	The outlet pipe from the Heritage Park Detention Basin does not connect to Bingham Creek and "dead-ends" into the ground, drastically reducing its capacity.	Install 18-inch pipe from the Heritage Park Detention Basin to Bingham Creek with outlet structure into the Creek.	$14,000	Not Eligible
28	35	Okubos Detention Basin	The basin always has water in it because of the elevation of the outlet structure in relation to the South Jordan Canal.	Replace outlet structure at the Okubos Detention Basin and install a check valve to prevent backflow from the South Jordan Canal.	$30,000	Not Eligible

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
29	36	7800 South from 3200 West to 3000 West	The storm drain manholes in this area are made out of corrugated metal pipe and need to be replaced. The 27-inch pipe needs to be slip lined.	Replace the four manholes with concrete. Slip line the 27-inch pipe from Jordan Landing Blvd to 3100 West.	$241,000	Not Eligible
30	37	8948 South and 1240 West	Storm drain ends in a bubble up at this location. Drainage from businesses to the west flow into the curb and gutter of 1240 West.	Install 18-inch pipe from the bubble up in 1240 West to the existing storm drain in 9000 South.	$43,000	Not Eligible
31	39	8660 South and 1841 West	The existing Cajean Estates retention basin does not connect to the storm drain system.	Install 18-inch pipe from the storm drain in Gardner Lane near Shulsen Lane to the Existing storm drain in Redwood Road.	$127,000	Not Eligible
32	43	Leo Park Road and Hawley Park Road	The cross street waterway is in need of repair.	Replace existing waterway with a new waterway and resurface roadway so waterway approach accommodates heavy traffic.	$10,000	Not Eligible
33	44	Clay Hollow from the Mountain View Corridor upstream to the box culvert under 7800 South	The natural channel has very steep and deep banks in this area, posing a obstacle in development plans and a danger to residents.	Install 6-foot by 4 foot box culvert in Clay Hollow from the Mountain View Corridor upstream to the box culvert under 7800 South.	$1,763,000	100%
				Southern Area Subtotal	**$5,446,000**	
34	2007 MP[1]	Barney's Creek U-111	West Jordan City Detention Project Identified in 2007 Master Plan	Construct 66.3 ac-ft detention basin (DB278)	$4,693,000	100%
35	2007 MP[1]	1500 West	West Jordan City Culvert Project Identified in 2007 Master Plan	Install 12-foot by 5-foot box culvert (BINC23B)	$338,000	Not Eligible
36	2007 MP[1]	9300 South 800 West	West Jordan City Culvert Project Identified in 2007 Master Plan	Install 24-inch RCP Canal Crossing (TR28B)	$160,000	Not Eligible
37	2007 MP[1]	Prosperity Road	West Jordan City Trunkline Project Identified in 2007 Master Plan	Install 18-inch RCP (T420)	$164,000	Not Eligible
38	2007 MP[1]	Dannon Way	West Jordan City Trunkline Project Identified in 2007 Master Plan	Install 30-inch RCP (T426, T431)	$186,000	6%

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
39	2007 MP[1]	Leo Park Road	West Jordan City Trunkline Project Identified in 2007 Master Plan	Install 18-inch RCP (T450A)	$348,000	37%
40	2007 MP[1]	2700 West	West Jordan City Trunkline Project Identified in 2007 Master Plan	Install 15-inch and 30-inch RCP (T158A, T158B, T159C)	$426,000	Not Eligible
41	2007 MP[1]	9800 South Hwy 111	Developer Detention Project Identified in 2007 Master Plan	Construct 5.6 ac-ft detention basin (DB404)	$633,000	100%
42	2007 MP[1]	9500 South 6800 West	Developer Detention Project Identified in 2007 Master Plan	Construct 10.8 ac-ft detention basin (DB406)	$1,135,000	100%
43	2007 MP[1]	Wells Park Road	Developer Trunkline Project Identified in 2007 Master Plan	Install 18-inch and 24-inch RCP (T416, T413B)	$367,000	100%
44	2007 MP[1]	7400 West	Developer Culvert Project Identified in 2007 Master Plan	Install 54-inch RCP (BARC277)	$207,000	100%
45	2007 MP[1]	6600 West	Developer Culvert Project Identified in 2007 Master Plan	Install 24-inch RCP (BARC281)	$160,000	100%
46	2007 MP[1]	6800 West	Developer Culvert Project Identified in 2007 Master Plan	Install 48-inch RCP (BARW291)	$198,000	100%
47	2007 MP[1]	7600 West	Developer Culvert Project Identified in 2007 Master Plan	Install 42-inch RCP (BARW297)	$187,000	100%
48	2007 MP[1]	9400 South	Developer Culvert Project Identified in 2007 Master Plan	Install 42-inch RCP (BARW300)	$187,000	100%
49	2007 MP[1]	9000 South	Developer Trunkline Project Identified in 2007 Master Plan	Install 18, 30, and 36-inch RCP (T293, T292A, T291A, T290A)	$2,553,000	100%
50	2007 MP[1]	6800 West	Developer Trunkline Project Identified in 2007 Master Plan	Install 24 and 30-inch RCP (T406, T300B, T291B)	$799,000	100%
51	2007 MP[1]	7300 West	Developer Culvert Project Identified in 2007 Master Plan	Install 36-inch RCP (UNW2273)	$176,000	100%
52	2007 MP[1]	Parallel to Hwy 111	Developer Culvert Project Identified in 2007 Master Plan	Install 42-inch RCP (UNW2271B)	$550,000	100%
53	2007 MP[1]	7300 West	Developer Culvert Project Identified in 2007 Master Plan	Install 30-inch RCP (UNW1272A)	$168,000	100%

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
54	2007 MP[1]	7200 West	Developer Culvert Project Identified in 2007 Master Plan	Install 30-inch RCP (UNW1272B)	$168,000	100%
55	2007 MP[1]	7700 West to 7400 West	Developer Culvert Project Identified in 2007 Master Plan	Install 24-inch RCP (DRYW211)	$497,000	100%
56	2007 MP[1]	7700 South from Hwy 111 to Kennecott RR	Developer Culvert Project Identified in 2007 Master Plan	Install 36-inch RCP (DRYW209)	$422,000	100%
57	2007 MP[1]	7400 West to Hwy 111	Developer Culvert Project Identified in 2007 Master Plan	Install 30-inch RCP (DRYW210A)	$1,097,000	100%
58	2007 MP[1]	Kennecott RR at 7000 South to 7100 South	Developer Culvert Project Identified in 2007 Master Plan	Install 36-inch RCP (DRYW216)	$324,000	100%
59	2007 MP[1]	6100 West	Developer Culvert Project Identified in 2007 Master Plan	Install 54-inch RCP (DRYW220)	$207,000	100%
60	2007 MP[1]	7600 South	Developer Culvert Project Identified in 2007 Master Plan	Install 30 and 42-inch RCP (DRYW108A)	$701,000	100%
61	2007 MP[1]	6500 West	Developer Trunkline Project Identified in 2007 Master Plan	Install 18-inch RCP (T413A)	$283,000	100%
62	2007 MP[1]	9800 South	Developer Trunkline Project Identified in 2007 Master Plan	Install 24-inch RCP (T404)	$143,000	100%
63	2007 MP[1]	Hwy 111	Developer Trunkline Project Identified in 2007 Master Plan	Install 18-inch RCP (T405, T299A)	$425,000	100%
64	2007 MP[1]	9400 South	Developer Trunkline Project Identified in 2007 Master Plan	Install 24-inch RCP (T299B, T300A)	$1,037,000	100%
65	2007 MP[1]	Hwy 111	Developer Trunkline Project Identified in 2007 Master Plan	Install 36-inch RCP (T292B)	$573,000	100%
66	2007 MP[1]	7100 West and 7800 South	Developer Trunkline Project Identified in 2007 Master Plan	Install 24-inch RCP (T233, T234)	$416,000	100%
67	2007 MP[1]	7400 South, Hwy 111, and 7500 South	Developer Trunkline Project Identified in 2007 Master Plan	Install 24 and 36-inch RCP (T214A, T214B, T231)	$1,121,000	100%
68	2007 MP[1]	6400 West	Developer Trunkline Project Identified in 2007 Master Plan	Install 18-inch RCP (T217B, T217A)	$566,000	100%

Project ID	Deficiency ID	Location	Problem Description	Preferred Solution	Project ($)	Impact Fee Eligibility
69	2007 MP[1]	7400 South and 6600 West	Developer Trunkline Project Identified in 2007 Master Plan	Install 36-inch RCP (T230, T216A, T216B)	$978,000	100%
70	2007 MP[1]	5450 West Old Bingham Hwy	Other Agency Culvert Project Identified in 2007 Master Plan	Replace with 42-inch RCP (OBH3A)	$187,000	100%
71	2007 MP[1]	5200 West Old Bingham Hwy	Other Agency Culvert Project Identified in 2007 Master Plan	Replace with 42-inch RCP (OBH3B)	$187,000	100%
72	2007 MP[1]	4500 West Old Bingham Hwy	Other Agency Culvert Project Identified in 2007 Master Plan	Replace with 42-inch RCP (OBH81A)	$187,000	100%
73	2007 MP[1]	9000 South Old Bingham Hwy	Other Agency Culvert Project Identified in 2007 Master Plan	Replace with 42-inch RCP (OBH81B)	$353,000	100%
74	2007 MP[1]	4800 West Old Bingham Hwy	Other Agency Culvert Project Identified in 2007 Master Plan	Replace with 42-inch RCP (OBH87)	$187,000	100%
75	2007 MP[1]	6600 South	Other Agency Trunkline Project Identified in 2007 Master Plan	Install 24 and 30-inch RCP (T203, T303, T304)	$1,912,000	100%
				2007 Master Plan Subtotal	**$25,606,000**	
				Total Cost	**$43,277,000**	